

# Mission Supporting Grand Challenge

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# Office of Nuclear Energy Mission Pillars

Existing Fleet



Advanced  
Reactor Pipeline



Fuel Cycle  
Infrastructure



Global  
Competitiveness



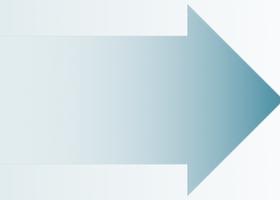
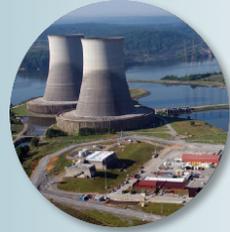
# Sustaining the Existing Fleet

- **Improving Performance and Reducing Costs**
  - LWRS – subsequent license renewal and technical improvements
  - Accident Tolerant fuel – enhanced performance and safety
  - Non-electric applications to improve flexibility and increase revenue generation
- **Policy and Market Reform Support**
  - Level the playing field with technology neutral policies
  - Ensure critical attributes are properly valued
  - Risk-informed, performance-based regulation
- **State and Local Technical Assistance, Education and Outreach**



# Nuclear Beyond Electricity – Advanced Reactors

NOW



Baseload Electricity Generation

FUTURE

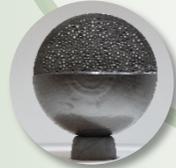
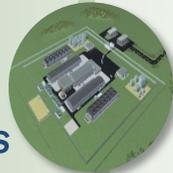
Advanced Reactors

Large LWRs

SMRs

Micros

Non-Water Reactors



Chemical Processes

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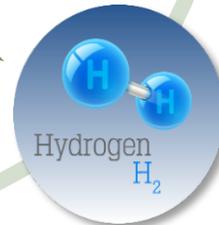
Heat



Flexible Electricity Generation



Industrial Applications

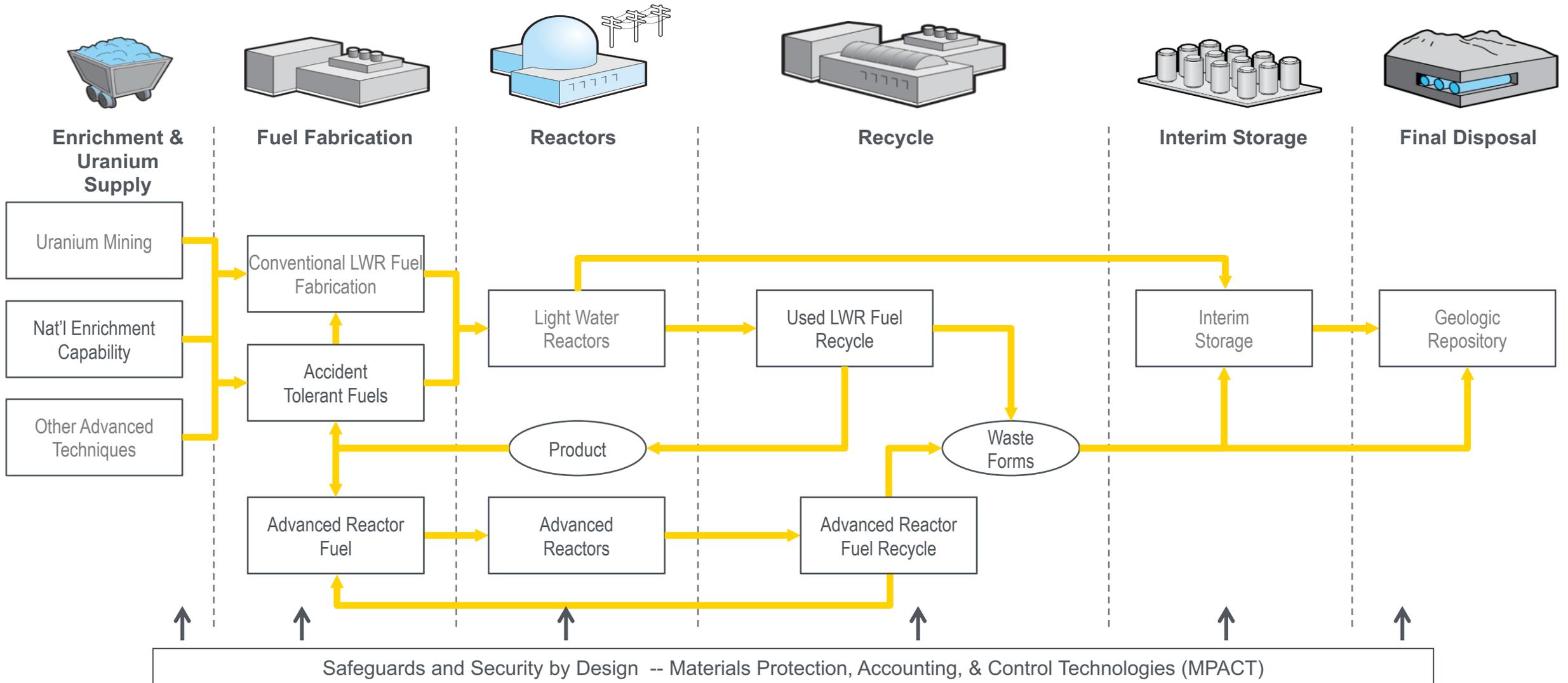


Hydrogen Production

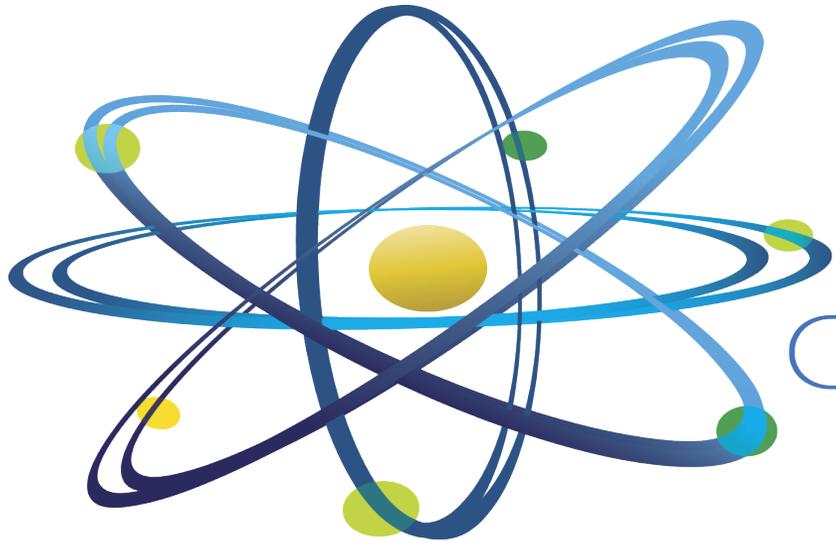


Clean Water

# Fuel Cycle Infrastructure



# Questions?



Clean. **Reliable. Nuclear.**